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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,108	08/01/2003	Tsuyoshi Yuki	103176-00003	3473
4372	7590	12/01/2005	EXAMINER	
ARENT FOX PLLC 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036			COSTALES, SHRUTI S	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/632,108

**Applicant(s)**

YUKI ET AL.

**Examiner**

Shruti S. Costales

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/11/03.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement submitted on December 11, 2003 was filed in compliance with the provisions of 37 CFR § 1.97. Accordingly, the information disclosure statement filed by the applicant has been considered by the Examiner.

### ***Specification***

2. The abstract of the disclosure is objected to because the applicant makes improper use of legal phraseology, such as "disclosed" and "comprising". See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly

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those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

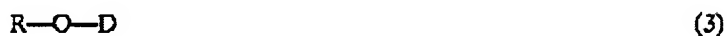
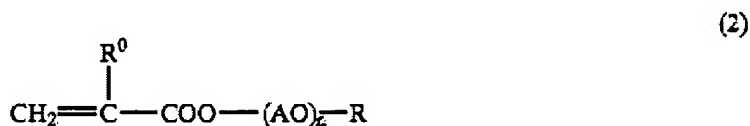
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Yuki et al. (U.S. Patent Number 6,746,993).

Yuki discloses viscosity index improvers for lube oils, automatic transmission fluid, gear oils, hydraulic fluids, and engine oils (Col. 1, lines 9-14; Col. 1, lines 26-28; and Col. 12, lines 53-63). The viscosity index improver includes a polymer (A1) OR (A0), wherein both polymers referred to generically as polymers (A) have a weight

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average molecular weight of 5,000 – 2,000,000 (Col. 1, lines 41-67 and Col. 2, lines 1-5). Polymer (A1) includes monomers (a), (b), and (c) represented by the following formulae:



wherein,  $\text{R}^0$  is hydrogen or a methyl group, R is a  $\text{C}_{1-40}$  alkyl group and may be represented by formula (5) shown at Col. 3 wherein  $\text{R}'$  and  $\text{R}''$  are the same or different straight chain  $\text{C}_{8-18}$  alkyl groups, n is 0 or an integer of 1-20 giving 0-10 on average, A is an  $\text{C}_{2-4}$  alkylene group, and D is a  $\text{C}_{2-10}$  alkenyl group (Col. 2, lines 15-67 and Col. 3, lines 43). Monomer (a), represented by formula (2), includes (meth)acrylates described in (a0) through (a6) including 2-octyldodecyl methacrylate, 2-decyltetradecyl methacrylate, 2-octyldodecyl acrylate, and 2-decyltetradecyl acrylate (Col. 3, lines 44-67 and Col. 4, lines 67). Monomer (b) is represented by formula (3) and includes vinyl ethers (Col. 5, lines 20-32). Monomer (c) is represented by formula (4) and includes alkenyl carboxylates (Col. 5, lines 33-42).

Monomer (d) is also included in (A1) and comprises nitrogen-containing unsaturated monomers inclusive of amino-containing monomers shown in formulas (6) and (7) at Col. 5, lines 43-67 and Col. 6, lines 54). Other monomers included in (A1) are (e)-(k), wherein monomer (e) is unsaturated hydrocarbons containing 2-20 carbon

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atoms (Col. 6, lines 51-67 and Col. 7, lines 1-8), monomer (f) is vinyl ketones (Col. 7, lines 9-11), monomer (g) is epoxy-containing unsaturated monomers (Col. 7, lines 12-16), monomer (h) is halogen-containing unsaturated monomers (Col. 16-20; see also Col. 7, lines 21-67 and Col. 8, lines 1-4). It is to be noted that "a generic claim cannot be allowed to an applicant if the prior art discloses a species falling within the claimed genus", and the species in that case will anticipate the genus. *In re Slayter*, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); *In re Gosteli*, 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989). Further, when the species is clearly named, the species claim is anticipated no matter how many other species are additionally named. *Ex parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990).

With respect to the amounts of the various monomers in the (A1), monomers (a) and (b) are present in an amount of at least 30% (Col. 8, lines 5-65). Monomers (c) and (d) are present in an amount of 0-45% and 0-20%, respectively (Col. 8, lines 22-29). Monomers (a), (b), and (c) are present in varying amounts in other embodiments as disclosed at Col. 8, lines 66-67 and Col. 9, lines 1-36). Monomers (b)-(k) are present in the amounts disclosed at Col. 9, lines 5-36). The viscosity index improver of Yuki includes one or more of polymers (A) in a concentration of 10-90% and also includes a diluent in an amount of 10-90% (Col. 12, lines 18-40). The kinematic viscosity of the base oil is 1-15 mm<sup>2</sup>/s at 100° C (Col. 12, lines 41-46). Further, the base oil has a viscosity index of at least 80 and 150 or less (Col. 12, lines 47-52).

In light of the above discussion, it is clear that the presently cited claims are anticipated.

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**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shruti S. Costales whose telephone number is (571) 272-8389. The examiner can normally be reached on Monday - Friday, 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

SSC  
Shruti S. Costales  
November 28, 2005

*Vasu Jagannathan*  
VASU JAGANNATHAN  
SUPERVISORY PATENT EXAMINER  
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